

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A joint comprising:
a push rod having a protruding portion; and
a main body having
an upper end and a lower end spaced in a push rod longitudinal direction, said
protruding portion of said push rod protruding along said push rod
longitudinal direction from said upper end of said main body,
~~said main body forming a push rod storage space~~ being formed in said main
body, said push rod storage space housing that houses said push rod,
[[and]]
a communication path being formed in said main body at said lower end, ~~said~~
~~protruding portion of said push rod protruding along said push rod~~
~~longitudinal direction from said upper end of said main body,~~
~~said main body including~~ a seal structure forming part being formed on an
outer circumference of said main body at said upper end, and
a male thread part being configured to thread together with a female thread
part of a nut member along the push rod longitudinal direction,
said seal structure forming part surrounding said push rod storage space and being
configured to form a seal structure by directly contacting a first tapered part of the nut
member when said female thread part and said male thread part are threaded together,

a portion of said protruding portion being configured to contact a part of said nut member when installed, said push rod being movable toward said lower end of said main body along the push rod longitudinal direction to communicate with a ~~second~~ fluid passageway of said nut member and said communication path.

2. (Previously Presented) The joint as recited in claim 1, wherein said seal structure forming part is a second tapered part inclined toward a large diameter of said main body and toward said lower end in the push rod longitudinal direction.

3. (Previously Presented) The joint as recited in claim 2, wherein an angle formed by an intersection of an inclination direction of said second tapered part with the push rod longitudinal direction is less than or equal to an angle formed by an inclination direction of the first tapered part of the nut member with the push rod longitudinal direction in a state in which said female thread part and said male thread part are threaded together.

4. (Currently Amended) The joint as recited in claim 2, wherein said second tapered part is provided with a ~~first~~ taper projection part that projects toward the outer circumference, and said ~~first~~ taper projection part is configured to form a seal structure by deforming when contacting said first tapered part of the nut member.

5. (Previously Presented) The joint as recited in claim 1, wherein said seal structure forming part includes a convex spherical surface.

6. (Previously Presented) The joint as recited in claim 1, wherein
said seal structure forming part includes a sealing member as a separate body, and said
sealing member is configured to form a seal structure by deforming when contacting said first
tapered part.

7. (Currently Amended) The joint as recited in claim 6, wherein
said seal structure forming part further includes a groove ~~for supporting~~ that supports
said sealing member.

8. (Currently Amended) The joint as recited in claim 1, wherein
said push rod includes a ~~second~~ projection part at said protruding portion that projects
toward the outer circumference, said ~~second~~ projection part is configured to contact said first
tapered part of the nut member.

9. (Currently Amended) The joint as recited in claim 8, wherein
said ~~second~~ projection part includes a third tapered part inclined toward the outer
circumference and toward said lower end in the push rod longitudinal direction, and
said third tapered part of said push rod is configured to contact said first tapered part of
the nut member.

10. (Previously Presented) The joint as recited in claim 1, wherein
said push rod includes a fourth tapered part at an end part on said protruding portion
that is inclined toward the outer circumference and toward said lower end in the push rod
longitudinal direction, and

said fourth tapered part is configured to contact said first tapered part of the nut member.

11. (Currently Amended) A joint comprising:

a push rod having a protruding portion; [[and]]

a main body having

an upper end and a lower end spaced in a push rod longitudinal direction, said

protruding portion of said push rod protruding along said push rod

longitudinal direction from said upper end of said main body,

~~said main body forming~~ a push rod storage space being formed in said main

body, said push rod storage space housing that houses said push rod,

[[and]]

a communication path being formed in said main body at said lower end, ~~said~~

~~protruding portion of said push rod protruding along said push rod~~

~~longitudinal direction from said upper end of said main body,~~

~~said main body including~~ a seal structure forming part being formed on an

outer circumference of said main body at said upper end, and[[,]]

a male thread part,

said seal structure forming part surrounding said push rod storage space and

being configured to form a seal structure by directly contacting a fifth

first tapered part ~~part~~ of a piping; and

a nut member including

a female thread part selectively threaded with said male thread part along the

push rod longitudinal direction, [[and]]

a ~~sixth~~ second tapered part inclined toward an outer circumferential side and
toward a female thread part side, and
~~said nut member forming~~ an opening being formed in said nut member to
insert ~~for inserting~~ the piping,

said seal structure forming part and said ~~sixth~~ second tapered part ~~[[are]]~~ being
configured to sandwich and to press a portion of said ~~fifth~~ first tapered part of the piping in a
state in which said female thread part and said male thread part are screwed together and the
piping is inserted in said opening of said nut member so that said ~~fifth~~ first tapered part
directly contacts said ~~sixth~~ second tapered part, and said protruding portion directly contacts
another portion of the ~~fifth~~ first tapered part,

said push rod being movable toward said lower end of said main body along the push
rod longitudinal direction to communicate with a ~~fourth~~ fluid passageway and said
communication path.

12. (Currently Amended) The joint as recited in claim 11, wherein
said seal structure forming part is a ~~seventh~~ third tapered part inclined toward a large
diameter of said main body and toward said lower end in the push rod longitudinal direction.

13. (Currently Amended) The joint as recited in claim 12, wherein
an angle formed by an intersection of an inclination direction of said ~~seventh~~ third
tapered part with the push rod longitudinal direction is less than or equal to an angle formed
by an inclination direction of the ~~sixth~~ second tapered part with the push rod longitudinal
direction in a state in which said female thread part and said male thread part are threaded
together.

14. (Currently Amended) The joint as recited in claim 12, wherein said ~~seventh~~ third tapered part is provided with a ~~third~~ taper projection part that projects toward the outer circumference, and said ~~third~~ taper projection part is configured to form a seal structure by contacting said ~~fifth~~ first tapered part of the piping.

15. (Currently Amended) The joint as recited in claim 11, wherein said seal structure forming part includes a convex spherical surface.

16. (Currently Amended) The joint as recited in claim 11, wherein said seal structure forming part includes a sealing member as a separate body, and said sealing member is configured to form a seal structure by deforming when contacting said ~~fifth~~ first tapered part.

17. (Currently Amended) The joint as recited in claim 16, wherein said seal structure forming part further includes a groove for supporting said sealing member.

18. (Currently Amended) The joint as recited in claim 11, wherein said push rod includes a ~~fourth~~ projection part that projects toward the outer circumference at said protruding portion, said ~~fourth~~ projection part is configured to contact said ~~fifth~~ first tapered part of the piping.

19. (Currently Amended) The joint as recited in claim 18, wherein

said ~~fourth~~ projection part includes an ~~eighth~~ fourth tapered part inclined toward the outer circumference and toward said lower end in the push rod longitudinal direction, and

said ~~eighth~~ fourth tapered part of said push rod is configured to contact said ~~fifth~~ first tapered part of the piping.

20. (Currently Amended) The joint as recited in claim 11, wherein

said push rod includes a ~~ninth~~ fifth tapered part at an end part on said protruding portion that is inclined toward the outer circumference and toward said lower end in the push rod longitudinal direction, and said ~~ninth~~ fifth tapered part is configured to contact said ~~fifth~~ first tapered part of the piping.